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(54) PLASMA STRIPPING METHOD FOR REMOVING PHOTORESIST AND RESIDUES AFTER ETCHING

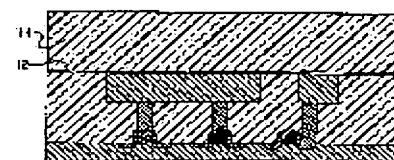
(57)Abstract:

PROBLEM TO BE SOLVED: To provide a plasma stripping method, having a high selective ratio and a high processing capacity and a dry ashing process.

SOLUTION: This is a method of removing a photoresist 16 and/or residues after etching from an exposed low K dielectric layer 14 and makes a non-oxygen plasma, having electrically neutral particles and charged particles, by exposing a non-oxygen gas to an energy source. Thereafter, the charge particles are selectively removed from the plasma. The electrically neutral particles react with the photoresist 16 and/or the residues after etching to form a volatile gas to be removed from a wafer by a gas flow. The gas composition of the non-oxygen plasma comprises a gas containing hydrogen and a gas containing fluorine, wherein the gas containing fluorine is about 10% or less of the gas composition.



(a)



(b)



(c)

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